WHAT IS CLAIMED IS:

1. A cylinder-indexing mechanism for a firearm comprising:

a frame;

a cylinder rotatably mounted in the frame, the cylinder comprising a plurality of cartridge-receiving chambers; and

a stop pin engageable with the cylinder, the stop pin and cylinder cooperatively arranged and configured such that the stop pin stoppingly engages the cylinder when the cylinder is rotated in a first direction, thereby limiting rotation of the cylinder in the first direction.

2. The mechanism of claim 1, further comprising a pawl selectively engageable with the cylinder and moveable from a first position wherein the pawl engages the cylinder to a second position wherein the pawl does not engage the cylinder.

3. The mechanism of claim 2, further comprising the pawl contacting the frame to hold the pawl in the second position.

4. The mechanism of claim 3, further comprising the pawl having a lobe projecting outwardly therefrom which contacts the frame.

5. The mechanism of claim 3, further comprising a hammer pivotably mounted to the frame for discharging the revolver, the hammer connected to the pawl such that moving the hammer alters the position of the pawl, wherein the pawl contacts the frame when the hammer is in a fully forward position to hold the pawl in the second position.

6. The mechanism of claim 5, wherein moving the hammer rearward from the fully forward position releases contact between the pawl and frame to allow the pawl to engage the cylinder in the first position.

7. The mechanism of claim 6, wherein the pawl is configured to move upwards to release contact between the pawl and frame when the hammer is moved rearward from the fully forward position.

8. The mechanism of claim 2, further comprising a biasing member biasing the pawl towards the cylinder.

9. The mechanism of claim 1, further comprising the frame having a cartridge loading gate cutout, wherein the stop pin stoppingly engages the cylinder in the first rotational direction such that at least one of the cartridge-receiving chambers is aligned with the cartridge loading gate cutout in the frame.

10. The mechanism of claim 1, wherein the stop pin and cylinder are further cooperatively arranged and configured to prevent stopping engagement between the stop pin and cylinder such that the cylinder may be freely rotated in a second direction opposite the first rotational direction.

11. The mechanism of claim 1, further comprising a biasing member associated with the stop pin to keep the stop pin biased towards the cylinder.

12. The mechanism of claim 11, wherein the stop pin is slidably moveable with respect to the cylinder.

13. The mechanism of claim 11, further comprising at least a portion of the stop pin and the biasing member being disposed in the frame.

14. The mechanism of claim 1, further comprising the cylinder including a ratchet having a plurality of teeth for engaging the stop pin.

15. The mechanism of claim 14, further comprising the teeth each being configured to stoppingly engage the stop pin in the first direction but not in a second rotational direction opposite the first direction.

16. The mechanism of claim 1, wherein the frame further comprises a cylinder frame for carrying the cylinder and a grip frame attachable to the cylinder frame.

17. The mechanism of claim 10, wherein when viewed from the perspective of the user the first direction is counter-clockwise and the second direction is clockwise.

18. A cylinder indexing mechanism for a firearm, the mechanism comprising:

a cylinder having a front, a rear, and a plurality of cartridge-receiving chambers;

a supporting structure, the cylinder rotatably carried by the supporting structure;

a pawl engageable with the cylinder; and

a cylinder indexing member carried by the supporting structure for limiting the rotation of the cylinder, the indexing member engageable with the rear of the cylinder,

wherein the cylinder is configured to be stoppingly engaged by the indexing member when the cylinder is rotated in a first direction and the cylinder is freely rotatable without being stoppingly engaged by the indexing member when the cylinder is rotated in a second direction opposite the first direction.

19. The mechanism of claim 18, further comprising the cylinder having a ratchet comprising a plurality of undulating surfaces for engaging the indexing member.

20. The mechanism of claim 19, wherein the surfaces are arranged on the ratchet to engage the indexing member such that at least one of the cartridge-receiving chambers may be stopped in alignment with a cartridge loading gate cutout in the supporting structure.

21. The mechanism of claim 18, wherein the cylinder indexing member is a pin having a substantially cylindrical shape.

22. The mechanism of claim 18, further comprising the indexing member being disposed at least partially in a recess in the supporting structure.

23. The mechanism of claim 22, further comprising a spring associated with the indexing member, the spring being disposed in the supporting structure recess and biasing the indexing member forward towards the cylinder.

24. The mechanism of claim 23, further comprising the recess having a step and the indexing member having a shoulder configured and adapted to engage the step such that the indexing member is prevented from being ejected from the recess by the spring.

25. The mechanism of claim 18, further comprising the pawl being located behind the cylinder and having a biasing member to bias the pawl towards the rear of the cylinder for engagement therewith;

wherein the pawl is movable from: (i) a first position in which the pawl is engageable with the cylinder to (ii) a second position in which the pawl is not engageable with the cylinder.

26. The mechanism of claim 25, further comprising the pawl having a projection extending outwardly therefrom to contact the supporting structure, the projection contacting the frame to hold the pawl in the second position.

27. A mechanism for creating indexed movement of a revolver cylinder, the mechanism comprising:

a frame;

a hammer pivotably mounted to the frame;

a cylinder rotatably carried by the frame and having a front and a rear, the cylinder comprising a plurality of cartridge-receiving chambers

a ratchet disposed on the rear of the cylinder;

a pawl pivotably mounted to the hammer and engageable with the cylinder ratchet, at least a portion of the pawl capable of contacting the frame; and

a stop pin carried by the frame and engageable with the cylinder ratchet, the ratchet and stop pin being cooperatively adapted and configured such that the stop pin is capable of engaging and stopping the rotation of the cylinder in a first direction.

28. The mechanism of claim 27, wherein the ratchet is configured to permit the cylinder to be freely rotated in a second direction opposite the first direction.

29. The mechanism of claim 27, further comprising the pin being biased towards the cylinder ratchet by a biasing member.

30. The mechanism of claim 29, wherein the biasing member and at least part of the pin are disposed in a recess in the frame.

31. The mechanism of claim 27, wherein the pawl is moveable from:

(i) a first position in which the pawl is not in contact with the frame and engaged with the cylinder; to

(ii) a second position in which the pawl is in contact with the frame and does not engage the cylinder.

32. The mechanism of claim 31, wherein the pawl is mounted to the hammer such that the pawl moves upwards when moved from the second position to the first position.

33. The mechanism of claim 3, wherein the frame further comprises a cylinder frame for carrying the cylinder and a grip frame attachable to the cylinder frame, the pawl contacting the grip frame to hold the pawl in the second position.

34. The mechanism of claim 33, further comprising the pawl having a lobe projecting outwardly therefrom which contacts the frame.